



FIG.1

STEP 1

CREATE AND FILL STRING ARRAY FRAG []  
WITH TEXT FRAGMENTS FROM SEARCH QUERY

STEP 2

LOCATE FIRST MATCH BETWEEN DATA AND EACH DATA  
FRAGMENT. STORE LOCATIONS AS POINTER VARIABLES

STEP 3

FOR EACH MATCH, DETERMINE OVERLAPS BETWEEN TWO  
MATCH LOCATIONS AND MARK RELEVANT ELEMENTS OF ARRAY

STEP 4

IF NO OVERLAPS GO TO STEP 8

STEP 5

FOR EACH MATCH, LOCATE THE NEXT MATCH BETWEEN  
THE DATA AND THE RESPECTIVE DATA FRAGMENT

STEP 6

FOR EACH MARKED ELEMENT OF ARRAY FRAG [], FOLLOW  
SUB-STEPS 6a TO 6f TO FIND INITIAL VALUES OF bstart  
AND bend. IF CONDITIONS OF SUB-STEP 6a ARE MET,  
GO TO STEP 9.

STEP 7

GO TO STEP 3

STEP 8

GO TO STEP 2 AND BEGIN NEXT ITERATION WITH  
GIVEN DATA REDEFINED TO START AT bstart+1

STEP 9

IF bstart=0, SEARCH IS UNSUCCESSFUL, ELSE SUCCESSFUL

FIG.2